CATS NEWSLETTER

The Official Journal of the Capital Area Timex/Sinclair Users Group

Presidential Ramblings

Believe it or not I'm finally learning how to use a QL, and am even a tiny bit comfortable using Quill. In fact, I've gotten so carried away with my various experiments I almost didn't remember to write this article for Tim. If there are other timid souls among our membership, let me state unequivocally that my only regrets are that I've waited so long to begin to enjoy the "bells and whistles" that the QL offers. (My most favorite is the error message "I've forgotten what I was doing." Needless to say, it has appeared quite regularly for me!)

Hopefully others will join me at noon on November 10th for the QL Beginners" Tutorial. Tom and Mannie were extremely patient with me at the first session, so I'm sure they will help you as well.

The SHARING session of last month's meeting proved so interesting that by consensus we allowed it to continue instead of moving into the more formal presentation Tom and Tim had agreed to present. Hopefully some of the gems of wisdom that were discussed will be written up elsewhere in this NL.[Sorry Ruth, but I did not get such an article - ED] Even if you can't come to our meetings, we'll try to pass along several tidbits that are presented in this important part of our monthly program.

Some of you haven't been around of late and we've missed you. Is there something we can present that will bring you back into the fold?

We believe that we're offering a wide variety of activities in both the Workshop time frame from 11:00 to 2:00 followed by the short business meeting, SHARING session, and formal program. However, we want YOUR opinion. Is there something you want explored? Are we too "heavy" into QL when the 2068 is the machine of your choice? (Despite my enthusiasm for the QL I have no intention of ignoring the 2068. In fact, to keep up with the mainstream I just bought a Larken interface.) Please let us know. Mayhaps the long awaited presentation on ARTIFICIAL INTELLIGENCE will provide incentive for your return. But if we won't be seeing you, drop a note or give one of us a call.

'Nuff for now

From The Editor:

Well, another month, another issue. Just as I finish one issue and have time to work on a few projects, another deadline comes along.

At least this month I had a week to work on my projects. Yes, I had the luxury of taking a week off from work and spend time at home hacking on the QL. I have touched up a few older programs, heavily updated one older one, and expanded on a newer one. All programs will be available to all QL users, including the source code.

I am distributing the programs (when I get all of the bugs out) using the GNU Public License Agreement, written by the Free Software Foundation. The Free

Contents

Key Dates

10 November: CATS Meeting
       11:00 Workshop
       1:00   Executive Board Meeting
       2:00   General Meeting
             Speaker
             Business Meeting

19 November: Newsletter Deadline
                 For the Next Issue

Software Foundation is based on the idea that all software should be free and come with source code. They do believe in the author keeping the copyright to the program, but that end users should have the capability of modifying the programs as needed.

The Free Software Foundation is writting a Unix-like operating system and utilities called GNU (Gnu's Not Unix). They do not have the kernal of the operating system yet, but they do have a number of utilities including a C compiler. I know of one QL user that is trying to convert the GNU C compiler to the QL.

In my other computer reading I have come across an item that concerns all programmers and utilmately computer users - software patents.

The U.S. Patent office has been issuing patents to software, or more to the point, computer algorithms. This means that if you use the same algorithm in your program (even if you came up with it on your own) you would be open for a lawsuit.

This may be fine for some more obscure algorithms, but the Patent Office knows so little about computers, that it has issued patents to fundimental algorithms, including those taught to every Computer Science student in the U.S. This even goes against the rule that all patents must not go to techniques that are widely known or obvious.

If this trend continues, every programmer will have to run a patent search on every program they write, forwarding the cost of these searches to the end user.

It may not affect us now, but 10 or so years down the road when most of use move on to other computers (Sinclairs won't last forever), it will nip us in the end.

Sample Fonts

By Bouldin & Jackson

From the Oct 89 Issue Of Plotter

```
      TIMEX SINCLAIR 2068 COMPUTER

          ---sample fonts---

AaBbCcDdEeFfGgHhIiJjKkLlMmNnOoPp
QqRrSsTtUuUvWwXxYyZz1234567890.,
!/?£:©;)('&%$#@!......Now is the
 time for all good men to come t
o the aid of their country!


    Press any key key to repeat

   20>REM by F. Bouldin & Ben Jac
kson (7-12-85)
   30 REM Near beginning of your
program before any print state-
ments add statement "GOSUB 9000"
 then add subroutine below (line
s 9000-9530).
   40 REM Example:
   42 REM
   45 GO SUB 9000
   50 PRINT AT 10,2;"TIMEX SINCLA
IR 2068 COMPUTER";AT 12,6;"---sa
mple fonts---";AT 14,0;"AaBbCcDd
EeFfGgHhIiJjKkLlMmNnOoPpQqRrSsTt
UuUvWwXxYyZz1234567890.,!/?£:©;)
('&%$#@!......Now is the time fo
r all good men to come to the ai
d of their country!"
   55 REM note required statement
 "GO SUB 9040" in line 60 for th
is example.
   60 PRINT FLASH 1;AT 10,2;AT 21
,2;"Press any key key to repeat
": PAUSE 0: CLS : GO SUB 9040: G
O TO 50
7000 REM
8000 REM
9000 REM "BOLD" character subrou
tine
9010 REM machine code routine
9020 RESTORE 9500: FOR I=63900 T
O 63979: READ A: POKE I,A: NEXT
I
9030 RANDOMIZE USR 63900
9040 PRINT AT 11,0;"""BOLD""char
acters desired?...Y/N"
9050 IF INKEY$="Y" OR INKEY$="y"
 THEN POKE 23607,250: CLS : RETU
RN
9060 IF INKEY$="N" OR INKEY$="n"
 THEN POKE 23607,60: CLS : RETUR
N
9070 GO TO 9050
9080 REM
9500 DATA 42,54,92,17,0,250,1,0,
4,126,18,230,3,32,4,126,203,207
9510 DATA 18,126,230,7,32,4,126,
203,215,18,126,230,15,32,4,126
9515 REM
9520 DATA 203,223,18,126,230,31,
32,4,126,203,231,18,126,230,63,3
2,4,126,203,239,18,126,254,66,32
9525 REM
9530 DATA 4,126,203,239,18,126,2
54,0,32,3,62,0,18,19,35,11,120,1
77,32,186,201
9595 REM
9990 STOP
9995 CLEAR : RANDOMIZE USR 100:
SAVE "bold1.B1" LINE 10
```

Free Data Basing Update

By Mark Fisher

What do the Auraria Library, the Colorado School of Mines, and Montgomery County Public Libraries have in common? A single local call to access them, that's what.

There are a number of large data bases offered to us consumers. They offer almost any kind of information, available at the touch of a button, (well, several buttons). They have one thing in common, however - they cost. And, if your urge for information strikes during the business day, the costs can be up to $75.00 an hour, to say nothing of the telco's share, often long distance.

There are some alternatives, however. Many libraries are converting to computerized catalogs, and as a side benefit, offering open public remote access to them. Two of my favorite open files are the Montgomery County Public Library and the University of Maryland.

```
Montgomery County Public Library
     (301) 217-3906
```

This system is the newest, and most comprehensive of the remote library catalogs. Dialing and connecting is simple and standard: 300 or 1200 BAUD, 8-1-N. Upon connecting, you are given a choice of databases. The primary one is the catalog of the Montgomery County Public Library, of course. A book can be searched for based on <N>ames (either author or subject), <K>eyword, <T>itle or <C>all number. Once selected, you'll have access to information on the book's location and status (lost, checked out, or held at which branch), as well as the customary contents of a card catalog entry. MC's collection isn't just books either - there are videotapes, audio tapes, and records as well.

But that's not all. If the Montgomery County Public Library doesn't have what you want, you can check 21 (!) other library

catalogs. According to my wife, these are based on a bank of CD-ROM disks in Rockville, so your search won't cost anyone long distance charges. The libraries involved seem to be mostly based around Colorado - I assume that's where this system was started from.

But THAT's not all. If your subject of interest is more likely to be in a magazine, the same rack of CD-ROM's contains information on 10,000 different journals, and 600,000 articles per year.

There is still more. There are databases including... "Choice Book Reviews", an Encyclopedia, Environmental Education, Metro Denver Facts (I told you it was Denver based), School Model Programs (little tiny school buildings?), and an Internet Resource Guide. The only one of these I tested - the Encyclopedia - required a password; I don't know about the others.

University of Maryland
(301) 403-4333 (College Park)

I've written about this system before, but it has been extensively revamped - even the phone number has changed. Things haven't changed much, however. It will connect at 8-1-N, though they say it needs 7-1-E, and 300, 1200, or 2400 BAUD. Upon getting a connect signal, you should wait ~20 seconds before pressing <ENTER>. You will then wait some more, before getting some unhelpful prompt. Type <TELNET UMCAT>, and, after a few more seconds, you'll be in.

Once in, however, you have access to about 80% of the material held by ALL branches of the University of Maryland system. Search options are flexible and reasonably complete, and you have status information on the books as well.

Yet Another Power Supply
By Tom Robbins

After reading Herb Schaaf's article on QL power supply modifications, I thought I would write up my alternate approach. I am currently powering a QL, Trump Card, Internal Mouse Interface and disk drive using the setup described below. The heat sinks and voltage regulators have been removed from both the QL and Trump Card since there is virtually no heat generated by this arrangement.

The object of this exercise was to elliminate as much heat as possible from the QL and reduce the load on the QL's power supply. In the true Sinclair fashion, I wanted to do it cheaply.

The modification is so easy, it is almost trivial. It consists of providing a dual power supply to the QL. I used a $5.95 surplus 'Coleco' power supply that provides +5v, +12v and -5v outputs. If your disk drive power supply is strong enough, you won't even have to spend the $5.95 -- you can 'steal' the 5 volts from it.

The -5v output is not used, the +5v powers the 5v bus of the QL and in conjunction with the 12v output powers a 3.5" disk drive. The original QL power supply is used to power the Microdrives and serial ports.

To perform the modification, take the following steps:
1. Measure the voltage on the Trump card regulator.
The center lug is ground, and on my card, the leg nearest the QL was the 5 volt leg.
2. Remove the heat sink and regulator from the QL. Remove the regulator from the Trump card.
3. Run a wire from the 5 volt line of the Trump card and connect this wire and the 5 volt line of the Coleco (or your disk drive power supply) to the 5 volt QL bus.

4. Connect the ground wire of the Coleco supply to the ground bus of the QL. You do not have to run a

ground to the trump card, as it is grounded through the expansion connector.

That's it. For $5.95 (or $0.00 if you use the 5 volts from your disk drive PSU) you have eliminated heat and regulator problems in the QL, the QL power suppply unit and the Trump Card.

The only potential problem is that the Coleco power supply is rated at 0.9 Amps on the 5 volt output. It runs somewhat warm, but I have not had any trouble in the short time that I have been using this setup.

Meeting Subject

CARROLL G. DUDLEY of the NASA/Goddard Space Flight Center in Greenbelt, MD will be speaking to the CATS general meeting at 2 pm Saturday, November 10, 1990. Mr. Dudley, who has been at Goddard over 20 years, has worked on various spacecraft ground support systems assignments, including the early construction and supervision of radio telemetry stations around the world.

He is presently a manager in Goddard's Mission Operations Division, and has been associated for many years with some of Goddard's biggest projects. His central theme will involve a behind-the-scenes look at how a large organization such as Goddard uses big computers, smaller computers, and all kinds of human resrouces in coping with a myriad of high-tech and not-so-high-tech space-age problems. His presentation will include some foils of recently-received images transmitted to Goddard by the Hubble space telescope.

Two Out of Three Ain't Bad
By Mark Fisher

Just a quick note about my hardware duels over the past month.

1) Disk Drive Defaults

The fault in my disk drive was that, first time each day, I would have to open the case, and physically jiggle the head-loading solenoid before it would let the read head drop down to the disk. It didn't seem to make sense - first time, but not after that. I finally decided to pull the solenoid. Sure enough, that was the problem. Mitsubishi had put a rubber pad on the frame of the solenoid to quiet its return. Over the years in a high-ozone environment, the rubber started to break down - and rubber that's breaking down gets sticky. The arm of the solenoid was being held back by this tack. A piece of scotch tape over the rubber, reassembly, and it was 100% again.

2) When the smoke comes out...

As Our Editor says, these chips actually work via the smoke that's inside. When the smoke comes out... I found out about this by incautiously pushing the Trump Card into its socket on the QL. I didn't know it at the time, but I had bent pins one and two together - 12 volts and ground. Smoke did issue, and the machine did stop. It turned out that the only cinder on the board was the 12 volt regulator - it looks like a transistor, right under the 5 volt regulator. Fortunately, it's one of the few standard parts on a QL, and after replacement, it too was 100%.

3) What's that weird stuff on the screen?

As a red-blooded member of CATS, I'll buy almost any orphan computer. One of these is a Tandy 102 laptop with a 40 x 8 screen. It was working perfectly, except that it's built in MODEM wouldn't receive. Transmit was fine, but the only time I could use the direct connect MODEM in the machine was when I could SEE the remote machine

I was connecting to. A-hah! thought I... since the RS-232 port is OK, the only remaining element is the MODEM chip itself - which turned out to be the same chip as used on the Anchor MODEM's for the 2068. A gob of putty on the top of the chip when re-assembled confirmed that I'd have enough space to add a socket, and so the substitution was made. Result? Same as before (!@#$%^&).

Task Force
By Tom Robbins

Taskforce was published in QL WORLD's Do It Yourself Toolkit Column in April 1989. The more or less monthly column is edited by Simon Goodwin and contains useful extensions to SuperBasic.

Taskforce is a Superbasic routine that can be used with Quill, Abacus, Archive, Easel and most other programs that do not normally multitask. It allows you to switch between them with CONTROl-C as if they were "well behaved" programs. This program does not have the bells and whistles of Taskmaster and Qram, but does offer several advantages - it uses very little memory (in fact, once a task is loaded, it uses no memory - it is a few lines of basic, needed only when you load new tasks. It is also free.

To use Taskforce, run it using LRUN FLP1_taskforce_bas (or Mdv1_ or whichever device it is stored on). The first prompt is "Enter the device and taskname"-- respond by entering flp1_archive or mdv1_Quill or whatever program you wish to execute. The second prompt is "Enter reserved space in K". At this prompt, enter the amount of memory you want to reserve for Basic or other tasks to be loaded. If you press <ENTER> at this prompt, no memory will be reserved.

CTRL-C is used to switch between loaded tasks and SuperBasic. Programs that do not have a 'legitamite' cursor (eg. Quill, Archive, Abacus and Easel-note that the 'cursor does not flash - it's really a position marker rather than a cursor) are given one. This

'real' cursor usually appears in the upper left corner of the screen and does not interfere with the program being executed.

Note that screens are not saved. Most commercial programs have a key or key combination that redraws the screen. For the Psion set provided with the QL, press <SHIFT-F5> after you use <CTRL-C> and the screen for the program you switched to will be redrawn.

For further information on this program, see pages 26-28 of the April 1989 issue of QL WORLD.

```
100     REMark    TASKFORCE    utility
    program
110 REMark  QL  WORLD  DIY  Toolkit
    3/89
120 REMark    1988 by Phil Spink
130 :
140 CLS#0
150 REMark Free  RAM  =  (SV.BASIC)
    -(SV.FREE)
160   free_k  =INT((SYS_L(16)-SYS_L
    (12))/1024)
170 PRINT#0; "TASKFORCE--QL  World
    DIY Toolkit      3/89  by Phil
    Spink",,free_k; "K bytes free."
180 INPUT#0; \" Enter task name and
    device: "! task_name$
190 INPUT #0\" Enter reserved space
    in K : "!space$
200 :
210  REMark reserve memory and load
    task
220 space="0"&space$
230 IF space<free_k AND space>=1
240     DIM dummy$(space-1,1022)
250 END IF
260      IF      SYS_W(96)=0:POKE_W
    SYS_VARS+96,1
270 task_tag=SYS_W(96)
280 EXEC task_name$
290  PAUSE 200: REMark Delay to
    allow memory allocation
300 :
310  REMark Enable cursor of task's
    first CON channel
320 ch_bas=SYS_L(120)
330 last_ch_num=SYS_W(114)
340  FOR  ch_ptr=ch_bas TO  ch_bas
    +last_ch_num * 4 STEP 4
350  REMark is the channel open ?
360     IF PEEK (ch_ptr)<>255
370       ch_def=PEEK_L(ch_ptr)
380        REMark is it's driver the
    same as for #0
```

```
390          IF  PEEK_L(ch_def+4)  =
     PEEK_L(PEEK_L(ch_bas)+4)
400  REMark  is  it  owned  by  the
     correct task
410  IF PEEK_W(ch_def+8) = task_tag
420  REMark Is  it  to  big  to  be a
     SCR definition
430  IF PEEK_L(ch_def)>120
440  POKE ch_def + 67, 1:REMark set
     SD.CURF
450                      EXIT ch_ptr
460                   END IF
470                 END IF
480               END IF
490            END IF
500 NEXT ch_ptr
510  PRINT \"W  A  R  N  I  N  G  ! !
     NO CON CHANNEL IN "!task_name$
520 END FOR ch_ptr
530 CLEAR
540 STOP
550 :
560 DEFine FuNction SYS_L(addr)
570             RETurn       PEEK_L
     (SYS_VARS+addr)
580 END DEFine
590 :
600 DEFine FuNction SYS_W(addr)
610                         RETurn
     PEEK_W(SYS_VARS+addr)
620 END DEFine
630 :
640 DEFine FuNction SYS_VARS
650      RETurn 163840 .
660 END DEFine
```

From Page 2

The same person that founded the
Free Software Foundation, Richard
Stallman, has founded The League
for Programming Freedom, to inform
the computer profession about the
problems facing them. If you are
interesting in knowing more, let me
know, or check out an article in
the November Issue of "Dr. Dobbs
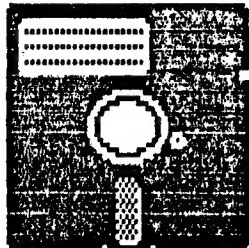Journal." I'll try to bring copies
of the article to the next meeting.

Time to step down from my soapbox

and get back on an old topic –
Articles. Yes, I'll ask   for
more articles. We need them from
more of you. We need diversity in
our authors and subject matter. As
a member of the user group, it is
your obligation to assist in the
group and writing an article is one
way to fulfill that obligation. SO
HIT THOSE WORD PROCESSORS! Hey, if
I have to, I have your phone
numbers, so.....

Hope you enjoy the issue.   See
you at the next meeting. I should
have the bugs worked out of my
programs by then, so all QL users
will have a chance get a copy.

Happy Hacking,

Tim

The Capital Area Timex/Sinclair Users Group is a not-for-profit group devoted to serving the interests of those who own, use, or are interested in the Timex/Sinclair family of computers.

Executive Board

President	Ruth Fegley
1st Vice President	Hank Dickson
2nd Vice President	Tom Robbins
Recording Secretary	Audrey Curnutt
Corresponding Secretary	Joe Miller
Treasurer	Barry Washington
Members-at-Large	Duane Parker
	Cliff Watson
	Akin Olowofoyeku
Immediate Past President	Bill Barnhart
Newsletter Editor & contact person	Tim Swenson (703) 820-6657

CATS maintains a gratis exchange of newsletters with approximately 30 Users Groups across the U.S. and Canada. Groups not sending a newsletter to us for six months are automatically taken off the list.
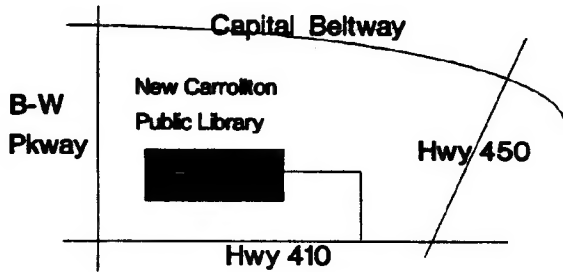
Meetings

Monthly meetings are held from 11:00 AM to 4:30 PM, on the second Saturday of each month, at the New Carrollton Public Library.

Newsletter

Memberships cost $15 per year, are good for 12 months, and include all privileges (access to libraries, group buys, etc.). A newsletter only subscription is available for persons living outside the Washington Metro area and is $12 per year.

Networks

Timex SIG on Compuserve: Wednesday night, 10:00 PM Eastern time (GO CLUB).

CATS BBS: (301) 588-0579, 8-N-1, 300/1200 baud. News and general information, 24 hours a day.

CATS Newsletter
P. O. Box 11017
Takoma Park, MD 20913

FIRST CLASS MAIL

Capital Beltway

B-W Pkway

New Carrollton Public Library

Hwy 450

Hwy 410

The next meeting of CATS will be held on: November 10, 1990

11:00 AM Workshop
2:00 PM General Meeting

At: New Carrollton Public Library 7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS. THIS IS THE ONLY ISSUE YOU WILL RECEIVE